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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/925,582	08/09/2001	John W. Shaffer	00-1-202	2930

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EXAMINER

WILLIAMS, JOSEPH L

ART UNIT	PAPER NUMBER
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2879

DATE MAILED: 03/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 09/925,582	<b>Applicant(s)</b> SHAFFER, JOHN W.	
	<b>Examiner</b> Joseph L. Williams	<b>Art Unit</b> 2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 November 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

The amendment filed on 07 November 2003 has been entered.

#### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Myojo et al. (US 5,828,169), of record.

Regarding claim 1, Myojo ('169) discloses in figures 1 and 2B, and in column 6, line 50 through column 9, line 53, an arc discharge lamp (no number) comprising: an arc chamber (6A), an amalgam tip (2) attached to and communicating with the arc chamber (6A), via narrow tube (4), through a constricted area (opening (3)); an amalgam retainer (22) of ceramic paper in the arc chamber abutted against the constricted area, the amalgam being vibration-insensitive, solid and liquid amalgam impervious and mercury vapor pervious; and an amalgam (1) contained within the amalgam tip.

Please note that the definition of ceramic paper used for the purpose of this action is noncellulosic paper fibers produced from inorganic materials. Ceramic fibers include all refractory fibers made of alumina, zirconia, thoria, magnesia, fused silica, hafnia, berylia, titanium oxide, potassium titanate, and their mixtures, with or without

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silica. By definition, monooxide ceramics, such as alumina ceramics, are composed of at least 80% oxides. More often they contain 90% or more base oxides, while special products may contain 99% and sometimes 100%. The main group of ceramic fibers is composed of silica in admixture with special oxides, such as aluminum and magnesium oxides, barium, and calcium (taken from

<http://palimpsest.stanford.edu/don/dt/dt0645.html>).

The retainer of Myojoo ('169) can be composed of porous glass (silica) and oxide particles, including aluminum and silicon (see column 9, lines 45-47).

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Myojo et al. (US 5,828,169), of record, in view of Stinton et al. (US 5,075,160).

Regarding claim 2, Myojo ('169) discloses all of the claimed limitations, but does not explicitly disclose that the retainer is made of ceramic felt.

Further regarding claim 2, Stinton ('160) teaches in column 2, line 59 through column 3, line 16 the use of a ceramic felt for the purpose of preventing particulate matter from damaging the device and thus increase its lifetime.

Hence it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the ceramic felt of Stinton in place of the ceramic retainer of Myojo for the purpose of preventing particulate matter from damaging the device and thus increase its lifetime.

Regarding claim 3, Stinton ('160) teaches in the abstract that the ceramic felt can be made of aluminosilicate fibers.

The reason for combining is the same as for claim 2 above.

Regarding claim 4, Stinton ('160) teaches in column 3, lines 50-51 that the diameter of the fibers is 4-8 microns (less than 10 microns).

The reason for combining is the same as for claim 2 above.

Regarding claim 5, primary reference Myojo ('169) teaches that the lamp is a low-pressure lamp.

Regarding claim 6, primary reference Myojo ('169) teaches in column 6, lines 64-65 that the amalgam includes bismuth and indium.

Regarding claim 7, primary reference Myojo ('169) teaches that the amalgam tip has a given diameter. Regarding the limitation that the amalgam retainer has a larger diameter, as opposed to the same size, prior to insertion, that limitation appears to be a

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product by process limitation, and thus not afforded patentable weight (see MPEP 2113).

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1-7 have been considered but are moot in view of the new ground(s) of rejection.

### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph L. Williams whose telephone number is (571) 272-2465. The examiner can normally be reached on M-F (6:30 AM-3:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D. Patel can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Joseph Williams

Examiner  
Art Unit 2879